PCV27

TREATMENT OF CHRONIC HEART FAILURE (CHF): IMPROVING SURVIVAL BUT NOT HEALTH-RELATED QUALITY OF LIFE (HRQL)

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OBJECTIVE: Treatments such as ACE inhibitors and beta-blockers reduce mortality in CHF. Demonstration of a parallel improvement of HRQL would appear of good added value. **METHOD:** A critical appraisal of published controlled trials used the guidance document and the checklist developed by ERIQA. **RESULTS:** Although a reduction of mortality and NYHA score was demonstrated in a few large studies, none was able to show a clear and unbiased HRQL improvement vs. placebo. Several major issues that would increase the confidence in the results are not presented or missing: hypotheses of changes in HRQL scores and power estimation; justification of the choice of questionnaires (e.g. 6 questionnaires were used in a trial and presented as HRQL, some of them being a dyspnoea score or a global evaluation of change, with no explanation whether they were covering different concepts, and without selecting the most important questionnaire for the primary statistical analysis); validation data (e.g. a trial used 14 subscales taken from 3 different validated questionnaires. Is the resultant questionnaire still valid?); statistical analysis plan; description and imputation of missing data; statement that the analysis is in intent to treat. In the majority of trials, small differences were observed for a few subscales among many, or only at some assessments over time. When the difference reaches statistical significance, it is only because of the large sample, but it has no clinical signification. Even for the physical subscale which may be of importance in CHF, small non significant effect sizes are observed. Some explanations have been proposed for these results: non severe patients included, questionnaire not reliable or responsive. **CONCLUSION:** There is concern to conclude that despite attempts of publications and general reviews to enhance the modest results, there is no definite demonstration that HRQL is improved by treatment which reduces mortality in CHF.

PCV28

SAVINGS ACHIEVED IN AN HMO SPONSORED PRIMARY CARE BASED DISEASE MANAGEMENT AND CASE MANAGEMENT INITIATIVE

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OBJECTIVE: To describe the cost savings achieved in HMO sponsored primary care-based case management and disease management programs in asthma, diabetes mellitus and congestive heart failure (CHF). **METHODS:** Continuously enrolled participants' total per member per month (PMPM) charges for medical services one year prior and one year after entry into HMO sponsored case management and disease management programs were compared during fiscal year January 1, 1998 to March 31, 2000. The HMO sponsored programs recruited patients in the primary care setting and relied on clinical guidelines and HMO employed patient education nurses and case management nurses. This initiative is based in 55 primary care sites serving 295,000 insureds across northeastern and central Pennsylvania in the United States. **RESULTS:** 327 patients with asthma had baseline PMPM of $311, which dropped to $274 PMPM after entry. In diabetes, 3,953 patients had a baseline PMPM of $468 that dropped to $434. The baseline PMPM dropped from $1,748 to $1,402 for 870 patients with CHF. For 965 patients receiving case management, the baseline PMPM was $1,074 and it dropped to $887. Total reductions in claims over one year for each program was $112,524, $1,264,052, $2,587,068 and $1,516,784, respectively with a total reduction in health care claims of $5,480,428. **CONCLUSION:** While these claims data may be limited by a lack of statistical significance and by regression to the mean, they suggest that case management and disease management programs in asthma, diabetes and congestive heart failure may be able to achieve significant financial savings compared to baseline levels of utilization.

PCV29

SUPPORTING IMPLEMENTATION OF PRESCRIPTION GUIDELINES IN MEDICAL WARDS: A RANDOMIZED TRIAL

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OBJECTIVE: To evaluate the acceptability and effectiveness of a "guided prescription" form implementing locally developed guidelines for preventive anticoagulation. **METHODS:** Thirty internal medicine wards were randomly assigned to either intervention (I) or control (C) group. I-group physicians were asked to use the guided prescription form whenever they considered prescribing preventive anticoagulation over a 2-month period. One-day surveys of all patients hospitalized in I and C wards were conducted before and after this intervention period. Physicians were also asked to rate independently whether preventive anticoagulation was required for a series of isolated or combined risk factors (1–9 scale), and to assess several attributes of the form (4-degree Likert scale). **RESULTS:** Of 313 completed prescription forms collected from I wards during the intervention period, 262 (84%) followed recommendations; an explicit "other" option was used for 36 additional patients (12%). Before and after surveys showed an overall decrease from 41% (146/358) to 33% (121/365) (95% CI: −11% to −4%) in the prevalence of preventive anticoagulation in I wards, while prescriptions remained stationary at 38% (154/402 and 134/352) in C wards. While scores as-

signed to risk factors that did not justify preventing anticoagulation according to the guideline tended to decrease in both groups, this was more marked in the I group. Almost all physicians in both groups agreed that using this form would help improving preventive anticoagulant prescriptions. Nevertheless, 8/45 in the C group and 15/46 in the I group thought that it might hinder prescribing treatments that could benefit patients. **CONCLUSION:** Further analyses are underway to confirm that changes observed in I group prescriptions reflect improved agreement with the guidelines, and to assess variations across wards and/or for different risk factors or combinations, reflecting possible differences in supervision by senior physicians, or demonstrating the need to improve the documentation of specific recommendations.

INFECTIOUS DISEASE

PID1

ASSOCIATED OUTCOMES OF INFLUENZA-LIKE-ILLNESS AND CLINICAL INFLUENZA IN ITALY

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OBJECTIVES: to estimate the natural history of influenza and the associated resource utilization and General Practitioner (GPs) workload in the Italian general population. **METHODS:** during a three-month winter epidemic period, 199 GPs from one Northern and one Southern Italian region reported daily the number of visits because of Influenza-like-illness (ILI), Clinical influenza (CI) and any other cause. Furthermore, the first 10 cases of CI in each month of the three-month period (a total of 30 cases per GP), were carefully recorded and followed up. **RESULTS:** about 200,000 visits were performed by 199 GPs. ILI and CI accounted for 13.8% and 8.3% of all visits respectively. Six thousand and fifty seven cases of CI were collected and evaluated for outcomes. In our sample, 20% of patients (pts) were at risk because of age (>65 years) or concurrent conditions. Almost all pts received at least one prescription for symptomatic drugs, and 36% received antibiotics. Complications (primarily upper and lower respiratory tract bacterial infections) affected 35% of pts. At risk pts had significantly higher complication rate (OR = 2.89; 95%C.I. 2.44–3.41), and required more exams and hospitalizations than other pts, accounting for most of direct costs associated with CI. Pts with CI had an average of 5 days of absence from work or school. **CONCLUSIONS:** influenza is associated with significant morbidity in general and at risk population, considerable working days lost and sizeable excess workload for GPs.

PID2

PHARMACOECONOMIC EVALUATION OF IMMUNOPROPHYLAXIS FOR RESPIRATORY SYNCYTIAL VIRUS (RSV) INFECTION IN HIGH-RISK INFANTS

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Respiratory syncytial virus (RSV), the leading cause of lower respiratory tract infection in children, results in an estimated 90,000 hospitalizations and 4,500 deaths each year in the United States. Children with underlying bronchopulmonary dysplasia, prematurity or immunodeficiency are known to be at high-risk for severe RSV illness. **OBJECTIVE:** To evaluate research addressing the pharmacoeconomics of RSV immunoglobulin (RSV-IG) and palivizumab, the only two available agents, to prevent RSV infection among high-risk infants. **METHODS:** Studies in English were identified from Medline (1993 to 2000) using search terms like RSV-IG, palivizumab, costs, cost-effectiveness. Additional studies were collected by searching bibliographies of identified articles and contacting study authors and other experts. Data was abstracted from each study using a standardized reporting form. **RESULTS:** Cost per hospitalization averted was the primary outcome measure across most studies. Cost-effectiveness estimates of RSV-IG have ranged from $3,800 to $8,800 per respiratory related hospitalization prevented, to $24,000 per year of life saved, to $102,608 to prevent hospitalization of a 3.3 kg infant. Economic evaluation of palivizumab also indicate varied estimates ranging from expected savings of ⩽39,107 per infant to costs of $72,712 per hospitalization prevented. Two recent studies compared both palivizumab and RSV-IG. The cost-effectiveness of both agents varied widely among different subgroups of premature infants based on their risk of RSV hospitalization defined by gestational age and duration of respiratory support. Some studies used assumptions about reduced mortality and morbidity that have not been shown in the clinical trials. Also cost-effective models utilizing RSV hospitalization rates from clinical trials reported less favorable results. **CONCLUSION:** Both RSV-IG and palivizumab are very costly interventions. Inconsistent data exists to conclude which is more cost-effective. In the absence of alternatives to the two agents, further research needs to be performed to determine the overall cost-effectiveness of immunoprophylaxis for RSV infection.

PID3

COST-EFFECTIVENESS OF HEPATITIS B VACCINATION IN THE NETHERLANDS

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